

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method in an Asynchronous Transfer Mode (ATM) network including an ingress switch and an egress switch, where the ingress switch serves an ingress device operated by a calling party and the egress switch serves an egress device operated by a called party, the method comprising:

receiving, in the ingress switch, a first signaling message and a second signaling message from the ingress device;

providing the first signaling message and the second signaling message to a signaling intercept processor associated with the ingress switch;

propagating the first signaling message and the second signaling message from the signaling intercept processor to a policy server, the policy server being associated with a policy profile database, the policy profile database storing entries that relate subscribers to policies, where each policy identifies one or more policy features, of a group of policy features, with which the related subscriber is associated;

identifying, in the policy profile database and based on the first signaling message and the second signaling message, a policy for the calling party;

determining, in the policy server and based on the first signaling message and the second signaling message, that the policy for the calling party is to be enforced;

executing, in the policy server and based on the first signaling message and the second signaling message, appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party;

determining whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to the first signaling message and the second signaling message, where the one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and where determining whether the policy condition associated with each policy feature is satisfied comprises:

identifying an available forward bandwidth from the ingress switch to the egress switch,

identifying an available reverse bandwidth from the egress switch to the ingress switch,

calculating a first requested bandwidth [[for]] associated with the first signaling message, where the first requested bandwidth includes a first forward requested bandwidth from the ingress switch to the egress switch and a first reverse requested bandwidth from the egress switch to the ingress switch,

calculating a second requested bandwidth associated with the second signaling message, where the second requested bandwidth includes a second forward requested bandwidth from the ingress switch to the egress switch and a second reverse requested bandwidth from the egress switch to the ingress switch,

determining whether that the calculated available forward bandwidth exceeds [[a]] the first forward requested bandwidth and that the available reverse bandwidth exceeds the first reverse requested bandwidth,

determining an occurrence of at least one of:

a total forward requested bandwidth, including the first requested forward bandwidth and the second requested forward bandwidth, exceeds the available forward bandwidth, or

a total reverse requested bandwidth, including the first requested reverse bandwidth and the second requested reverse bandwidth, exceeds the available reverse bandwidth,

determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth for the first signaling message, and

determining that the policy condition is not satisfied for the aggregate bandwidth limit feature for the second signaling message, and

forwarding, to the ingress device, a connection failure notice related to the second signaling message; and

establishing a connection path, related to the first signaling message, between the ingress switch and the egress switch based on the determination that the policy condition is satisfied for each policy feature, of the one or more policy features identified by the policy for the calling party.

2. (currently amended) The method in an ATM network as set forth in claim 1,
where at least one of the first signaling message or the second signaling message comprises a
Connect message.

3. (currently amended) The method in an ATM network as set forth in claim 1,
where at least one of the first signaling message or the second signaling message comprises an
Add Party message.

4. (currently amended) The method in an ATM network as set forth in claim 1,
where at least one of the first signaling message or the second signaling message comprises a
Release message.

5. (currently amended) The method in an ATM network as set forth in claim 1,
where at least one of the first signaling message or the second signaling message comprises a
Setup message.

6. (previously presented) The method in an ATM network as set forth in claim 5,
where the one or more policy features, identified by the policy for the calling party, further
comprises a source address validation feature, and
where determining whether the policy condition associated with each policy
feature is satisfied comprises:

determining whether an address associated with the calling party is within
a range of authorized addresses, and

determining that the policy condition is satisfied for the source address validation feature when the address, associated with the calling party, is within the range of authorized addresses.

7. (currently amended) The method in an ATM network as set forth in claim 5, where the one or more policy features, identified by the policy for the calling party, further comprises a maximum call attempt rate limit feature, and

where determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether one of the first signaling message or the second signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated, and

determining that the policy condition is satisfied for the maximum call attempt rate limit feature when one of the first signaling message or the second signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

8. (previously presented) The method in an ATM network as set forth in claim 5, where the one or more policy features, identified by the policy for the calling party, further comprises a destination address screening feature, and

where determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the called party is within a list of address ranges to which the calling party is allowed to call, and

determining that the policy condition is satisfied for the destination address screening feature when the address, associated with the called party, is within the list of address ranges to which the calling party is allowed to call.

9. (currently amended) The method in an ATM network as set forth in claim 5, where the method further comprises:

identifying a policy for the called party, the policy for the called party including a source address screening feature;

determining that the policy for the called party is to be enforced;

determining whether a policy condition associated with the source address screening feature is satisfied with respect to at least one of the first signaling message or the second signaling message, where determining whether the policy condition association with the source address screening feature is satisfied includes:

determining whether an address associated with the calling party is within a list of address ranges from which the called party is allowed to receive calls; and

determining that the policy condition is satisfied for the source address screening feature when the address, associated with the calling party, is within the list of address ranges from which the called party is allowed to receive calls, and

where the establishing the connection path is based on whether the condition is satisfied for the source address screening feature.

10. (currently amended) The method in an ATM network as set forth in claim 5, where the one or more policy features, identified by the policy for the calling party, further comprises a maximum burst size limit feature, and

where determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether a burst size in at least one of the first signaling message or the second signaling message exceeds a limit, and

determining that the policy condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

11. (canceled)

12. (currently amended) The method in an ATM network as set forth in claim 5, where the one or more policy features, identified by the policy for the calling party, further comprises a service class selection feature, and

where determining whether the policy condition associated with each policy feature is satisfied comprises:

determining a requested class of service based on at least one of the first signaling message or the second signaling message,

determining whether the requested class of service is permitted for a customer logical port with which the calling party is associated; and

determining that the policy condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated.

13. (previously presented) The method in an ATM network as set forth in claim 5, where the one or more policy features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature, and

where determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether a quantity of concurrent calls, if a call is established between the calling party and the called party, exceeds a maximum number of concurrent calls, and

determining that the policy condition is satisfied for the maximum concurrent call limit feature when the quantity of concurrent calls does not exceed the maximum number of concurrent calls.

14. (currently amended) An Asynchronous Transfer Mode (ATM) network for effectuating intelligent policy features with respect to a first call and a second call to be established between a calling party and a called party, comprising:

an ATM switch serving a customer premises equipment (CPE) operated by the calling party;

a signaling intercept processor associated with the ATM switch, the signaling intercept processor to intercept a first signaling message relative to the first call and a second signaling message relative to the second call; and

a policy server associated with the signaling intercept processor, the policy server being associated with a policy profile database, the policy profile database storing entries that relate subscribers to policies, where each of the policies identifies one or more policy features, of a plurality of policy features, with which the related subscriber is associated, where the policy server is to:

determine that a policy, of the policies in the policy profile database, is to be enforced for the calling party,

execute appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party, and

determine whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to the first signaling message and the second signaling message, where a first connection path is established when the policy condition for each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to the first signaling message, where a second connection path is established when the policy condition for each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to the second signaling message, where the one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature for determining a maximum bandwidth allowable for a particular network port authorized

for use by the calling party, and where, when determining whether the policy condition associated with each policy feature is satisfied, the policy server is to:

identify an available forward bandwidth between the calling party and the called party,

identify an available reverse bandwidth between the called party and the calling party,

calculate bandwidth [[for]] associated with the first signaling message, where the first requested bandwidth includes a first forward requested bandwidth from the calling party and the called party and a first reverse requested bandwidth from the called party and the calling party,

calculate a second requested bandwidth associated with the second signaling message, where the second requested bandwidth includes a second forward requested bandwidth from the calling party and the called party and a second reverse requested bandwidth from the called party and the calling party,

determine whether that the calculated available forward bandwidth exceeds [[a]] the first forward requested bandwidth and that the available reverse bandwidth exceeds the first reverse requested bandwidth,

determine an occurrence of at least one of:

a total forward requested bandwidth, including the first requested forward bandwidth and the second requested forward bandwidth, exceeds the available forward bandwidth, or

a total reverse requested bandwidth, including the first requested reverse bandwidth and the second requested reverse bandwidth, exceeds the available reverse bandwidth. [[and]]

determine that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth for the first signaling message, and

determine that the policy condition is not satisfied for the aggregate bandwidth limit feature for the second signaling message.

15. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 14, where at least one of the first signaling message or the second signaling message comprises a Connect message.

16. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 14, where at least one of the first signaling message or the second signaling message comprises an Add Party message.

17. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 14, where at least one of the first signaling message or the second signaling message comprises a Release message.

18. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 14, where at least one of the first signaling message or the second signaling message comprises a Setup message.

19. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 18, where the one or more policy features, identified by the policy for the calling party, comprises a source address validation feature for ensuring that the party is an authorized party for accessing the ATM network through a particular network port associated with the CPE, and

where, when determining whether the policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether an address associated with the calling party is within a range of authorized addresses, and

determine that the policy condition is satisfied for the source address validation feature when the address, associated with the calling party, is within the range of authorized addresses.

20. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 19, where the particular network port is a Customer Logical Port.

21. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 19, where the particular network port is a full physical port.

22. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 18, where the one or more policy features, identified by the policy for the calling party, further comprises a maximum call attempt rate limit feature for monitoring the number of Setup messages received from the calling party over a predetermined period of time, and

where, when determining whether the policy condition associated with each policy feature is satisfied, the policy server is further to:

determine whether one of the first signaling message or the second signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated, and

determine that the policy condition is satisfied for the maximum call attempt rate limit feature when one of the first signaling message or the second signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

23. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 18, where the one or more policy features, identified by the policy for the calling party, comprises a destination

address screening feature for defining a plurality of addresses to which the party can effectuate at least one of the first call or the second call, and

where, when determining whether the policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether an address associated with the called party is within the plurality of addresses, and

determining that the policy condition is satisfied for the destination address screening feature when the address, associated with the called party, is within the plurality of addresses.

24. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 23, where the destination address screening feature is established for a group of subscribers to which the calling party belongs.

25. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 18, where the ATM network further comprises:

a second policy server to:

identify a policy for the called party, the policy for the called party including a source address screening feature for defining a plurality of addresses from which one of the first call and the second call can be initiated to the called party,

determine whether a policy condition associated with the source address screening feature is satisfied with respect to one of the first signaling message or the second signaling message, where, when determining whether the policy condition association with the source address screening feature is satisfied, the second policy server is to:

determine whether an address associated with the calling party is within the plurality of addresses, and

determine that the policy condition is satisfied for the source address screening feature when the address, associated with the calling party, is within the plurality of addresses, and

where one of the first connection path or the second connection path is established based on whether the condition is satisfied for the source address screening feature for an associated one of the first signaling message or the second signaling message.

26. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 25, where the source address screening feature is established for a group of subscribers to which the called party belongs.

27. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 18, where the one or more policy features, identified by the policy for the calling party, comprises a maximum burst size limit feature for limiting a burst-size request associated with one of the first call or the second call, and

where, when determining whether the policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether a burst size in one of the first signaling message or the second signaling message exceeds a limit, and

determine that the policy condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

28. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 27, where the burst-size request comprises the number of packets per second allowed to be transmitted to the ATM network with respect to one of the first call or the second call.

29. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 27, where the burst-size request comprises the number of packets per second allowed to be received by the called party from the ATM network with respect to one of the first call or the second call.

30. (canceled)

31. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 18, where the one or more policy features, identified by the policy for the calling party, comprises a service class

selection feature for specifying a service class with respect to a network port used by the party, and

where, when determining whether the policy condition associated with each policy feature is satisfied, the policy server is to:

determine a requested class of service based on one of the first signaling message or the second signaling message.

determine whether the requested class of service is permitted for a customer logical port with which the calling party is associated; and

determine that the condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated.

32. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 31, where the service class comprises a constant bit-rate (CBR) service.

33. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 31, where the service class comprises a variable bit-rate (VBR) service.

34. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 33, where the VBR service is a real-time VBR service.

35. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 33, where the VBR service is a non-real-time VBR service.

36. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 31, where the service class comprises an unspecified bit-rate (UBR) service.

37. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 31, where the service class comprises an available bit-rate (ABR) service.

38. (currently amended) The ATM network for effectuating intelligent policy features with respect to [[a]] the first call and the second call as set forth in claim 18, where the one or more policy features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature for specifying the total number of calls allowed concurrently with respect to a network port used by the calling party, and

where, when determining whether the policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether a quantity of concurrent calls, if [[a]] at least one of the first call or the second call is established between the calling party and the called party, exceeds a maximum number of concurrent calls, and

determine that the condition is satisfied for the maximum concurrent call limit feature when the quantity of concurrent calls does not exceed the maximum number of concurrent calls.

39. (currently amended) A tangible non-transitory computer-readable medium operable with an Asynchronous Transfer Mode (ATM) network node, the computer-readable medium carrying a sequence of instructions provided for executing service logic which, when executed by a processing entity associated with the ATM network node, causes the ATM network node to perform a method comprising:

receiving, in the ATM network node, a first signaling message and a second signaling message associated with respectively, respect to a first call and a second call from a calling party, the first signaling message and the second signaling message being received from an intercept processor;

identifying, in a policy profile database associated with the ATM network node and based on at least one of the first signaling message or the second signaling message, a policy for the calling party, the policy profile database storing entries that relate subscribers to policies, where each policy identifies one or more policy features, of a group of policy features, with which the related subscriber is associated;

executing, based on at least one of the first signaling message or the second signaling message, appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party;

determining whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect

to the first signaling message and the second signaling message, where the one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature for determining a maximum bandwidth allowable for a particular network port authorized for use by the calling party, and where the determining whether the policy condition associated with each policy feature is satisfied comprises:

identifying an available forward bandwidth from the ingress switch to the egress switch,

identifying an available reverse bandwidth from the egress switch to the ingress switch,

calculating a first requested bandwidth [[for]] associated with the first signaling message, where the first requested bandwidth includes a first forward requested bandwidth from the ingress switch to the egress switch and a first reverse requested bandwidth from the egress switch to the ingress switch,

calculating a second requested bandwidth associated with the second signaling message, where the second requested bandwidth includes a second forward requested bandwidth from the ingress switch to the egress switch and a second reverse requested bandwidth from the egress switch to the ingress switch,

determining whether that the calculated available forward bandwidth exceeds [[a]] the first forward requested bandwidth and that the available reverse bandwidth exceeds the first reverse requested bandwidth,

determining an occurrence of at least one of:

a total forward requested bandwidth, including the first requested forward bandwidth and the second requested forward bandwidth, exceeds the available forward bandwidth, or

a total reverse requested bandwidth, including the first requested reverse bandwidth and the second requested reverse bandwidth, exceeds the available reverse bandwidth, [[and]]

determining that the policy condition is satisfied for the aggregate bandwidth limit feature ~~when the calculated bandwidth does not exceed the requested bandwidth for the first signaling message, and~~

determining that the policy condition is not satisfied for the aggregate bandwidth limit feature for the second signaling message; and

upon determining that the policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to the first signaling message, causing a connection path, related to the first signaling message, to be established between the calling party and the called party.

40-41. (canceled)

42. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 39, where at least one of the signing first signaling message or the second signaling message comprises a Connect message.

43. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 39, where at least one of the first signaling message or the second signaling message comprises an Add Party message.

44. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 39, where at least one of the first signaling message or the second signaling message comprises a Release message.

45. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 39, where at least one of the first signaling message or the second signaling message comprises a Setup message.

46. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 45, where the one or more policy features, identified by the policy for the calling party, further comprises a source address validation feature for ensuring that the calling party is an authorized party for accessing the ATM network node through a particular network port associated with the ATM network node, and where the determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the calling party is within a range of authorized addresses, and

determining that the policy condition is satisfied for the source address validation feature when the address, associated with the calling party, is within the range of authorized addresses.

47. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 46, where the particular network port is a Customer Logical Port.

48. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 46, where the particular network port is a full physical port.

49. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 45, where the one or more policy features, identified by the policy for the calling party, further comprises a maximum call attempt rate limit feature for monitoring the number of Setup messages received from the calling party over a predetermined period of time, and

where the determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether at least one of the first signaling message or the second signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated, and

determining that the policy condition is satisfied for the maximum call attempt rate limit feature when the at least one of the first signaling message or the second signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

50. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 45, where the one or more policy features, identified by the policy for the calling party, comprises a destination address screening feature, and

where the determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the called party is within a list of address ranges to which the callings allowed to call, and

determining that the policy condition is satisfied for the destination address screening feature when the address, associated with the called party, is within the list of address ranges to which the calling party is allowed to call.

51-53. (canceled)

54. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 45, where the one or more policy features, identified by the policy for the calling party, comprises a maximum burst size limit

feature for limiting a burst-size request associated with at least one of the first call or the second call, and

where the determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether a burst size in at least one of the first signaling message or the second signaling message exceeds a limit, and

determining that the policy condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

55. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 54, where the burst-size request comprises a quantity of packets per second allowed to be transmitted to the ATM network node with respect to at least one of the first call or the second call.

56. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 54, where the burst-size request comprises a quantity of packets per second allowed to be received by the calling party from the ATM network node with respect to at least one of the first call or the second call.

57. (canceled)

58. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 45, where the one or more policy

features, identified by the policy for the calling party, comprises a service class selection feature for specifying a service class with respect to a particular network port used by the calling party, and

where the determining whether the policy condition associated with each policy feature is satisfied comprises:

determining a requested class of service based on at least one of the first signaling message or the second signaling message,

determining whether the requested class of service is permitted for a customer logical port with which the calling party is associated; and

determining that the policy condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated.

59. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 58, where the service class comprises a constant bit-rate (CBR) service.

60. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 58, where the service class comprises a variable bit-rate (VBR) service.

61. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 60, where the VBR service is a real-time VBR service.

62. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 60, where the VBR service is a non-real-time VBR service.

63. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 58, where the service class comprises an unspecified bit-rate (UBR) service.

64. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 58, where the service class comprises an available bit-rate (ABR) service.

65. (currently amended) The tangible non-transitory computer-readable medium operable with an ATM network node as set forth in claim 45, where the one or more policy features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature for specifying the total number of calls allowed concurrently with respect to a particular network port used by the calling party, and

where the determining whether the policy condition associated with each policy feature is satisfied comprises:

determining whether a quantity of concurrent calls, if a call is established between the calling party and the called party, exceeds a maximum number of concurrent calls, and

determining that the policy condition is satisfied for the maximum concurrent call limit feature when the quantity of concurrent calls does not exceed the maximum number of concurrent calls.

66. (withdrawn) A memory structure for storing data usable in effectuating intelligent policy features in an Asynchronous Transfer Mode (ATM) network wherein said memory structure is operable with a processing entity associated with a policy server node disposed in said ATM network, comprising:

a data structure having a list of subscribers wherein said subscribers are authorized to access said ATM network to setup virtual channel connections for service;

each of said subscribers having an ATM address and a Customer Logical Port (CLP) ID associated therewith; and

a profile array associated with said subscribers wherein a policy feature record is populated for each subscriber with at least one policy feature which indicates a specific treatment for a call to be effectuated relative to said each subscriber.

67. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 66, wherein said at least one policy feature is selected from the group consisting of: a source address validation feature, a maximum call attempt rate limit feature, a destination address screening feature, a source address

screening feature, a maximum burst size limit feature, an aggregate bandwidth limit feature, a service class selection feature, and a maximum concurrent call limit feature.

68. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 67, wherein said virtual channel connections comprise switched connections.

69. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 68, wherein said at least one policy feature is invoked by a trigger received in a signaling message transmitted with respect to said call.

70. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Connect message.

71. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises an Add Party message.

72. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Release message.

73. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Setup message.

74. (withdrawn) A source address validation method operable in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

assigning a port ID to a Customer Logical Port (CLP) served by an ATM node disposed in said network;

associating a customer ID with said CLP wherein a plurality of addresses specified for said customer ID are authorized for use with said CLP;

upon receiving in said ATM node a signaling message from a user operating a customer premises equipment (CPE) through said CLP, determining if said CPE's address belongs to said plurality of addresses authorized for said CLP; and

if so, establishing a virtual channel connection through said ATM network for said user.

75. (withdrawn) A method of restricting call connection attempts by a user in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

specifying a limit on the number of call setup requests received over a predetermined period at a Customer Logical Port (CLP) served by an ATM node disposed in said network;

receiving in said ATM node a signaling message from said user operating a customer premises equipment (CPE) through said CLP;

determining if said limit on the number of call setup requests is exceeded by said signaling message in said predetermined period; and

if said limit on the number of call setup requests is not exceeded by said signaling message in said predetermined period, establishing a virtual channel connection through said ATM network for said user.

76. (withdrawn) A method of screening destination addresses in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a positive list of addresses to which a user is allowed to make call connections;

defining a negative list addresses to which said user is not allowed to make call connections;

receiving in an ATM node a signaling message from said user operating a customer premises equipment (CPE) through a Customer Logical Port served by said ATM node, said signaling message for attempting to setup a call connection to a called party;

determining if said called party's address belongs to said positive list of addresses; and

if so, establishing said call connection through said ATM network for said user.

77. (withdrawn) A method of screening source addresses in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a positive list of addresses from which call connections are allowed to terminate to a user;

defining a negative list addresses from which call connections are not allowed to terminate to said user;

receiving in an ATM node a signaling message from a calling party operating a customer premises equipment (CPE) through a Customer Logical Port served by said ATM node, said signaling message for attempting to setup a call connection to said user;

determining if said calling party's address belongs to said positive list of addresses; and

if so, establishing said call connection through said ATM network for said user.

78. (withdrawn) A method of restricting burst-size requests received for call connections in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a forward burst-size limit allowed for an individual call connection established through a Customer Logical Port served by an ATM node disposed in said network;

defining a backward burst-size limit allowed for said individual call connection established through said CLP;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection, said signaling message including at least one of a forward burst-size request and a backward burst-size request;

determining if at least one of said forward burst-size request and said backward burst-size request exceeds said corresponding burst-size limit;

if so, denying said particular call connection through said ATM network for said user.

79. (withdrawn) A class-of-service provisioning method for call connections in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

configuring a plurality of service classes for a Customer Logical Port served by an ATM node disposed in said network;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection, said signaling message including a class-of-service request;

determining if said class-of-service request is allowed for said CLP;
if so, establishing said call connection through said ATM network for said user.

80. (withdrawn) A method of restricting the number of concurrent active call connections in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a concurrent call limit allowed for a Customer Logical Port served by an ATM node disposed in said network;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection;

determining if said concurrent call limit for said CLP would be exceeded by said signaling message;

if so, denying said particular call connection through said ATM network for said user.

81. (withdrawn) A bandwidth control method operable in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

specifying a total forward bandwidth allocated for a Customer Logical Port (CLP) served by an ATM node disposed in said network;

specifying a total backward bandwidth allocated for said CLP;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection, said signaling message including at least one of a service class request and a plurality of bandwidth parameters;

calculating at least one of a forward bandwidth request and a backward bandwidth request corresponding to said particular call connection;

applying an overbooking factor to at least of said forward bandwidth request and said backward bandwidth request calculated for said particular call connection, thereby generating an adjusted forward bandwidth request and an adjusted backward bandwidth request;

computing a remaining bandwidth after accounting for bandwidth in use in each direction;

comparing said adjusted forward bandwidth request and said adjusted backward bandwidth request to said remaining bandwidth in each direction; and

if said adjusted forward and backward bandwidth requests exceed said remaining bandwidth in each direction, establishing said particular call connection through said ATM network for said user.